

From: Lefteri H. Tsoukalas [tsoukala@purdue.edu]
Sent: Friday, February 24, 2006 10:01 PM
To: Dunn, Peter E.
Cc: katehi@ecn.purdue.edu
Subject: Inquiry
Attachments: Memo Confirmation of Sonofusion at Purdue.pdf; Request-Complaint on Sonofusion Confirmation.pdf

Dear Peter,

I have received an inquiry from Mrs Eugenie Reich, a freelance writer working on a story for Nature, and a memo from Professors Ishii and Bertodano from the School of Nuclear Engineering raising concerns about two papers published by Purdue researchers last year claiming to have confirmatory results for "Sonofusion." The two papers are:

1. Confirmatory Experiments for Nuclear Emissions During Acoustic Cavitation" by Y. Xu and A. Butt, published in the Journal of Nuclear Engineering And Design, 235, pp 1317-1324, 2005.
2. Bubble Dynamics and Tritium Emission During Bubble Fusion Experiments," by Y. Xu, A. Butt, and S. T. Revankar, Proceedings of the 11th International Topical Meeting on Nuclear Reactor Thermal-Hydraulics (NURETH-11), Avignon, France, October 2-6, 2005 (Publication 548).

Sonofusion (also known as "Bubble Fusion") is an approach to nuclear fusion proposed by a group of researchers lead by Prof. Rusi Taleyarkhan that appeared for the first time in Science (March 8, 2002) while Dr. Taleyarkhan was at Oak Ridge National Laboratory. He subsequently joined Purdue (August 2003). There has been no independence confirmation of the sonofusion claims except for the two papers above that have been portrayed as "independent confirmation," although A.. Butt was an MS student and Y. Xu a postdoctoral student working under Dr. Taleyarkhan's supervision in his lab. Dr. S. Revankar is an Associate Professor of Nuclear Engineering (his name appears as a co-author on publication number 2.).

I requested an informal fact-finding committee comprised of three senior and highly respected members of the School's faculty to look into the circumstances of the two papers. The informal committee, Professor C. H. Choi and Professor Emeriti F. Clikeman and K. O. Ott, send me a memo earlier today which I have attached. Attached you will find the request to the committee.

Please advise on on how to proceed with this delicate matter.

Thank you.

Lefteri

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